



CORRECTED SEQUENCE LISTING

<110> Masakazu Takeuchi
Yoshimi Takai

<120> Rabconnectin-3-binding protein

<130> 2003946-0055

<140> 10/645, 335

<141> 2003-08-21

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gcg ccc aca cat tgc atc tca gcg gta ctt tta aca gat gat ggg gcc 96
Ala Pro Thr His Cys Ile Ser Ala Val Leu Leu Thr Asp Asp Gly Ala
20 25 30

acg atc gta aca gga tgt cac gac gga caa ata tgt ctc tgg gat ctt 144
Thr Ile Val Thr Gly Cys His Asp Gly Gln Ile Cys Leu Trp Asp Leu
35 40 45

tca gta gaa ctg caa att aat cct cga gca ctg ttg ttt ggt cat aca 192
Ser Val Glu Leu Gln Ile Asn Pro Arg Ala Leu Leu Phe Gly His Thr
50 55 60

gca tca atc act tgt ttg tct aaa gct tgt gct tcc agt gac aaa cag 240
Ala Ser Ile Thr Cys Leu Ser Lys Ala Cys Ala Ser Ser Asp Lys Gln
65 70 75 80

tat att gtg agt gca tct gaa agt gga gag atg tgc ctc tgg gat gtg 288
Tyr Ile Val Ser Ala Ser Glu Ser Gly Glu Met Cys Leu Trp Asp Val
85 90 95

agt gat ggc aga tgt att gaa ttt aca aaa tta gct tgc aca cat act 336
Ser Asp Gly Arg Cys Ile Glu Phe Thr Lys Leu Ala Cys Thr His Thr

100	105	110	
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Gly Ile Gln Phe Tyr Gln Phe Ser Val Gly Asn Gln Arg Glu Gly Arg			
115	120	125	
ctt tta tgc cac gga cat tac cct gaa atc ctt gtt gtg gat gct acc			432
Leu Leu Cys His Gly His Tyr Pro Glu Ile Leu Val Val Asp Ala Thr			
130	135	140	
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Ser Leu Glu Val Leu Tyr Ser Leu Val Ser Lys Ile Ser Pro Asp Trp			
145	150	155	160
att agc tcc atg agt att att cga tcc cac cga aca caa gag gac aca			528
Ile Ser Ser Met Ser Ile Ile Arg Ser His Arg Thr Gln Glu Asp Thr			
165	170	175	
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Val Val Ala Leu Ser Val Thr Gly Ile Leu Lys Val Trp Ile Val Thr			
180	185	190	
tcg gaa ata agt gac atg cag gat act gag cca ata ttt gag gag gaa			624
Ser Glu Ile Ser Asp Met Gln Asp Thr Glu Pro Ile Phe Glu Glu Glu			
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tcc aaa cca att tat tgt cag aat tgc caa agc atc tct ttt tgt gca			672
Ser Lys Pro Ile Tyr Cys Gln Asn Cys Gln Ser Ile Ser Phe Cys Ala			
210	215	220	
ttt aca caa agg tca ctt ttg gtt gtg tgt tcc aaa tat tgg agg gtg			720
Phe Thr Gln Arg Ser Leu Leu Val Val Cys Ser Lys Tyr Trp Arg Val			
225	230	235	240
ttc gat gcc gga gac tat tcc ttg ttg tgt tca ggt cct agt gaa aat			768
Phe Asp Ala Gly Asp Tyr Ser Leu Leu Cys Ser Gly Pro Ser Glu Asn			
245	250	255	
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Gly Gln Thr Trp Thr Gly Gly Asp Phe Val Ser Ser Asp Lys Val Ile			
260	265	270	
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Ile Trp Thr Glu Asn Gly Gln Ser Tyr Ile Tyr Lys Leu Pro Ala Ser			
275	280	285	
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Cys Leu Pro Ala Ser Asp Ser Phe Arg Ser Asp Val Gly Lys Ala Val			
290	295	300	
gaa aat tta att cct cct gta caa cat atc ctc ttg gat cga aaa gat			960
Glu Asn Leu Ile Pro Pro Val Gln His Ile Leu Leu Asp Arg Lys Asp			
305	310	315	320
aaa gag ttg cta att tgt cct cct gtt act cgg ttc ttc tat gga tgc			1008
Lys Glu Leu Leu Ile Cys Pro Pro Val Thr Arg Phe Phe Tyr Gly Cys			
325	330	335	
aga gaa tat ttc cat aaa ctg tta att cag ggt gat tct tct gga agg			1056
Arg Glu Tyr Phe His Lys Leu Leu Ile Gln Gly Asp Ser Ser Gly Arg			
340	345	350	
ttg aat att tgg aac ata tca gac aca gct gat aaa cag gga agt gaa			1104

Leu Asn Ile Trp Asn Ile Ser Asp Thr Ala Asp Lys Gln Gly Ser Glu			
355	360	365	
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Glu Gly Leu Ala Met Thr Thr Ser Ile Ser Leu Gln Glu Ala Phe Asp			
370	375	380	
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Lys Leu Asn Pro Cys Pro Ala Gly Ile Ile Asp Gln Leu Ser Val Ile			
385	390	395	400
ccc aat agt aat gaa cct ctt aaa gta act gca agt gtg tac ata cca			1248
Pro Asn Ser Asn Glu Pro Leu Lys Val Thr Ala Ser Val Tyr Ile Pro			
405	410	415	
gca cat gga cga ctt gtt tgt cgt gaa gat gga agc ata gtt att			1296
Ala His Gly Arg Leu Val Cys Gly Arg Glu Asp Gly Ser Ile Val Ile			
420	425	430	
gta cct gcc aca cag acg gcc ata gta cag ctg ttg caa ggg gaa cac			1344
Val Pro Ala Thr Gln Thr Ala Ile Val Gln Leu Leu Gln Gly Glu His			
435	440	445	
atg ctc aga aga ggt tgg cca cct cac aga aca ctc cgt ggt cat cgg			1392
Met Leu Arg Arg Gly Trp Pro Pro His Arg Thr Leu Arg Gly His Arg			
450	455	460	
aac aaa gtc aca tgt ttg cta tat cct cat cag gtc tca gct cgg tat			1440
Asn Lys Val Thr Cys Leu Leu Tyr Pro His Gln Val Ser Ala Arg Tyr			
465	470	475	480
gat caa aga tac ctg ata tct gga ggt gtg gat ttt tca gtc ata att			1488
Asp Gln Arg Tyr Leu Ile Ser Gly Gly Val Asp Phe Ser Val Ile Ile			
485	490	495	
tgg gac ata ttt tct gga gaa atg aaa cat atc ttc tgt gtt cat ggt			1536
Trp Asp Ile Phe Ser Gly Glu Met Lys His Ile Phe Cys Val His Gly			
500	505	510	
ggt gag att act caa ctt cta gtt cca cct gaa aac tgt agt gca aga			1584
Gly Glu Ile Thr Gln Leu Leu Val Pro Pro Glu Asn Cys Ser Ala Arg			
515	520	525	
gta cag cac tgc atc tgc tct gta gcc agt gac cac tca gta gga ctt			1632
Val Gln His Cys Ile Cys Ser Val Ala Ser Asp His Ser Val Gly Leu			
530	535	540	
cta agt ttg cga gag aaa aaa tgc ata atg ttg gca tct cgt cac ctt			1680
Leu Ser Leu Arg Glu Lys Lys Cys Ile Met Leu Ala Ser Arg His Leu			
545	550	555	560
ttt cct att caa gta atc aaa tgg agg cct tct gat gat tac ctg gtg			1728
Phe Pro Ile Gln Val Ile Lys Trp Arg Pro Ser Asp Asp Tyr Leu Val			
565	570	575	
gtg ggg tgt tca gat ggt tct gtg tac gtc tgg caa atg gat act ggt			1776
Val Gly Cys Ser Asp Gly Ser Val Tyr Val Trp Gln Met Asp Thr Gly			
580	585	590	
gca ttg gat cgt tgt gtg atg ggg ata aca gca gtt gag att cta aac			1824
Ala Leu Asp Arg Cys Val Met Gly Ile Thr Ala Val Glu Ile Leu Asn			
595	600	605	

gct tgt gat gaa gct gtt cct gct gct gtt gat tca ctt agt cat cca Ala Cys Asp Glu Ala Val Pro Ala Ala Val Asp Ser Leu Ser His Pro 610 615 620	1872
gca gtc aac cta aaa caa gct atg acg aga cgt agt ctt gct gct ctt Ala Val Asn Leu Lys Gln Ala Met Thr Arg Arg Ser Leu Ala Ala Leu 625 630 635 640	1920
aaa aat atg gcc cat cat aag cta caa acc ctt gca act aac ctc ttg Lys Asn Met Ala His His Lys Leu Gln Thr Leu Ala Thr Asn Leu Leu 645 650 655	1968
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tcc ctg atg gtt caa gca ata aag aca aac cta aca gac ccg gac ata Ser Leu Met Val Gln Ala Ile Lys Thr Asn Leu Thr Asp Pro Asp Ile 675 680 685	2064
cat gtg cta ttc ttt gat gtg gaa gcg ttg att att caa ctc ctg act His Val Leu Phe Phe Asp Val Glu Ala Leu Ile Ile Gln Leu Leu Thr 690 695 700	2112
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caa aaa gca tct ggc agt tca gac aaa ggg ggc tct ttt tta act gga Gln Lys Ala Ser Gly Ser Ser Asp Lys Gly Gly Ser Phe Leu Thr Gly 725 730 735	2208
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gat gaa gtt tgc ctg gat cgc ctt gga atg ctg aaa ccc cac tgc acc Asp Glu Val Cys Leu Asp Arg Leu Gly Met Leu Lys Pro His Cys Thr 820 825 830	2496
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ccg ggt tat aat cag cct gct tgt aaa ctg tca cat ggg aaa aca gaa Pro Gly Tyr Asn Gln Pro Ala Cys Lys Leu Ser His Gly Lys Thr Glu	2592

850	855	860	
gta gga agg aag ctg cca gcg tct gag gga gta gga aag gga act tac			2640
Val Gly Arg Lys Leu Pro Ala Ser Glu Gly Val Gly Lys Gly Thr Tyr			
865	870	875	880
gga gtg tcc cgt gcc gtc acc aca cag cat ctc ctg tct atc att tct			2688
Gly Val Ser Arg Ala Val Thr Thr Gln His Leu Leu Ser Ile Ile Ser			
885	890	895	
ttg gca aat act tta atg agt atg acc aat gca act ttt att ggt gat			2736
Leu Ala Asn Thr Leu Met Ser Met Thr Asn Ala Thr Phe Ile Gly Asp			
900	905	910	
cat atg aag aag ggt cct acc agg cca cct aga cca agc acc cca gac			2784
His Met Lys Lys Gly Pro Thr Arg Pro Pro Arg Pro Ser Thr Pro Asp			
915	920	925	
ctt tct aag gca agg ggt tcc cct cca act tcc agt aat att gtg caa			2832
Leu Ser Lys Ala Arg Gly Ser Pro Pro Thr Ser Ser Asn Ile Val Gln			
930	935	940	
gga cag att aaa caa gtt gct gca cct gtc gtt tcc gct cgg tct gat			2880
Gly Gln Ile Lys Gln Val Ala Ala Pro Val Val Ser Ala Arg Ser Asp			
945	950	955	960
gct gat cac tct ggc tct gac cct cct tct gct cct gct tta cat acc			2928
Ala Asp His Ser Gly Ser Asp Pro Pro Ser Ala Pro Ala Leu His Thr			
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Cys Phe Leu Val Asn Glu Gly Trp Ser Gln Leu Ala Ala Met His Cys			
980	985	990	
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Val Met Leu Pro Asp Leu Leu Gly Leu Asp Lys Phe Arg Pro Pro Leu			
995	1000	1005	
ctg gag atg ctg gcc cga aga tgg caa gat cga tgc ttg gag gtg			3069
Leu Glu Met Leu Ala Arg Arg Trp Gln Asp Arg Cys Leu Glu Val			
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aga gaa gcc gca cag gcc ctg ctt ctg gcg gaa ctg aga aga att			3114
Arg Glu Ala Ala Gln Ala Leu Leu Leu Ala Glu Leu Arg Arg Ile			
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gag cag gca ggc agg aag gaa gcc att gat gcc tgg gct cct tac			3159
Glu Gln Ala Gly Arg Lys Glu Ala Ile Asp Ala Trp Ala Pro Tyr			
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tta cct cag tac ata gac cac gtc ata tca cct gga gtc aca tca			3204
Leu Pro Gln Tyr Ile Asp His Val Ile Ser Pro Gly Val Thr Ser			
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gaa gcc gcg cag act atc acc acg gct cct gat gcc tca ggg cct			3249
Glu Ala Ala Gln Thr Ile Thr Thr Ala Pro Asp Ala Ser Gly Pro			
1070	1075	1080	
gaa gca aaa gtc cag gag gaa gag cat gac ctt gtt gac gat gac			3294
Glu Ala Lys Val Gln Glu Glu Glu His Asp Leu Val Asp Asp Asp			
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atc acc act ggt tgc tta tca agt gtc cca caa atg aaa aaa att			3339

Ile	Thr	Thr	Gly	Cys	Leu	Ser	Ser	Val	Pro	Gln	Met	Lys	Lys	Ile	
1100					1105					1110					
tct	aca	tct	tac	gag	gaa	aga	cgg	aag	caa	gct	acc	gct	att	gtt	3384
Ser	Thr	Ser	Tyr	Glu	Glu	Arg	Arg	Lys	Gln	Ala	Thr	Ala	Ile	Val	
1115					1120					1125					
tta	ctt	gga	gta	ata	gga	gct	gaa	ttt	ggt	gct	gaa	att	gaa	cct	3429
Leu	Leu	Gly	Val	Ile	Gly	Ala	Glu	Phe	Gly	Ala	Glu	Ile	Glu	Pro	
1130					1135					1140					
cct	aaa	cta	ttg	acc	aga	cct	cga	agc	tct	agc	caa	att	cct	gag	3474
Pro	Lys	Leu	Leu	Thr	Arg	Pro	Arg	Ser	Ser	Ser	Gln	Ile	Pro	Glu	
1145					1150					1155					
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Gly	Phe	Gly	Leu	Thr	Ser	Gly	Gly	Ser	Asn	Tyr	Ser	Leu	Ala	Arg	
1160					1165					1170					
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His	Thr	Cys	Lys	Ala	Leu	Thr	Phe	Leu	Leu	Leu	Gln	Pro	Pro	Ser	
1175					1180					1185					
ccc	aaa	ctt	cct	cca	cac	agc	act	atc	cga	aga	aca	gcc	att	gat	3609
Pro	Lys	Leu	Pro	Pro	His	Ser	Thr	Ile	Arg	Arg	Thr	Ala	Ile	Asp	
1190					1195					1200					
ctg	att	gga	cgt	ggg	ttc	act	gtt	tgg	gag	cct	tac	atg	gat	gtg	3654
Leu	Ile	Gly	Arg	Gly	Phe	Thr	Val	Trp	Glu	Pro	Tyr	Met	Asp	Val	
1205					1210					1215					
tcc	gct	gtt	ctg	atg	ggg	ctt	ctc	gaa	ctt	tgt	gcc	gat	gcc	gag	3699
Ser	Ala	Val	Leu	Met	Gly	Leu	Leu	Glu	Leu	Cys	Ala	Asp	Ala	Glu	
1220					1225					1230					
aaa	caa	ctt	gcc	aac	atc	aca	atg	ggg	ttg	cct	ctg	agc	cca	gca	3744
Lys	Gln	Leu	Ala	Asn	Ile	Thr	Met	Gly	Leu	Pro	Leu	Ser	Pro	Ala	
1235					1240					1245					
gct	gac	tgc	gcc	cgc	tct	gcg	agg	cat	gcc	ctc	tcg	ctc	att	gcc	3789
Ala	Asp	Ser	Ala	Arg	Ser	Ala	Arg	His	Ala	Leu	Ser	Leu	Ile	Ala	
1250					1255					1260					
acc	gcc	aga	cca	ccc	gcc	ttc	atc	acc	acc	ata	gcc	aaa	gag	gta	3834
Thr	Ala	Arg	Pro	Pro	Ala	Phe	Ile	Thr	Thr	Ile	Ala	Lys	Glu	Val	
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cac	aga	cat	acg	gct	ctt	gca	gca	aat	acc	caa	tca	cag	cag	aat	3879
His	Arg	His	Thr	Ala	Leu	Ala	Ala	Asn	Thr	Gln	Ser	Gln	Gln	Asn	
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atg	cac	aca	aca	act	ctt	gca	cga	gct	aaa	ggg	gaa	att	ttg	aga	3924
Met	His	Thr	Thr	Thr	Leu	Ala	Arg	Ala	Lys	Gly	Glu	Ile	Leu	Arg	
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gtc	att	gaa	att	ctt	att	gaa	aag	atg	ccc	aca	gat	gtt	gtg	gat	3969
Val	Ile	Glu	Ile	Leu	Ile	Glu	Lys	Met	Pro	Thr	Asp	Val	Val	Asp	
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ctt	ctc	gtg	gag	gtt	atg	gac	atc	att	atg	tac	tgc	ctt	gaa	gga	4014
Leu	Leu	Val	Glu	Val	Met	Asp	Ile	Ile	Met	Tyr	Cys	Leu	Glu	Gly	
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Ser Leu	Val Lys Lys Lys Gly	Leu Gln Glu Cys Phe	Pro Ala Ile	
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tgc agg	ttc tac atg gtc agc	tat tat gag cgg aat	cac aga ata	4104
Cys Arg	Phe Tyr Met Val Ser	Tyr Tyr Glu Arg Asn	His Arg Ile	
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Ala Val	Gly Ala Arg His Gly	Ser Val Ala Leu Tyr	Asp Ile Arg	
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act gga	aaa tgt cag aca atc	cat gga cac aag gga	cca atc act	4194
Thr Gly	Lys Cys Gln Thr Ile	His Gly His Lys Gly	Pro Ile Thr	
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gca gtg	gct ttt gct cct gat	gga aga tat ctt gcc	acc tac tca	4239
Ala Val	Ala Phe Ala Pro Asp	Gly Arg Tyr Leu Ala	Thr Tyr Ser	
1400	1405	1410		
aac act	gac agc cac att tct	ttt tgg cag atg aac	acg tca ctg	4284
Asn Thr	Asp Ser His Ile Ser	Phe Trp Gln Met Asn	Thr Ser Leu	
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Leu Gly	Ser Ile Gly Met Leu	Asn Ser Ala Pro Gln	Leu Arg Cys	
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Ile Lys	Thr Tyr Gln Val Pro	Pro Val Gln Pro Ala	Ser Pro Gly	
1445	1450	1455		
tcc cac	aat gcc ctc aag ctg	gcc cgg ctc atc tgg	act tcc aac	4419
Ser His	Asn Ala Leu Lys Leu	Ala Arg Leu Ile Trp	Thr Ser Asn	
1460	1465	1470		
cgc aac	gtc atc ctc atg gcc	cat gac ggg aag gag	cac cgc ttc	4464
Arg Asn	Val Ile Leu Met Ala	His Asp Gly Lys Glu	His Arg Phe	
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atg gtc	taa			4473
Met Val				
1490				

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 35 40 45
 Ser Val Glu Leu Gln Ile Asn Pro Arg Ala Leu Leu Phe Gly His Thr

50	55	60
Ala Ser Ile Thr Cys Leu Ser Lys Ala Cys Ala Ser Ser Asp Lys Gln		
65	70	75
Tyr Ile Val Ser Ala Ser Glu Ser Gly Glu Met Cys Leu Trp Asp Val		
85	90	95
Ser Asp Gly Arg Cys Ile Glu Phe Thr Lys Leu Ala Cys Thr His Thr		
100	105	110
Gly Ile Gln Phe Tyr Gln Phe Ser Val Gly Asn Gln Arg Glu Gly Arg		
115	120	125
Leu Leu Cys His Gly His Tyr Pro Glu Ile Leu Val Val Asp Ala Thr		
130	135	140
Ser Leu Glu Val Leu Tyr Ser Leu Val Ser Lys Ile Ser Pro Asp Trp		
145	150	155
Ile Ser Ser Met Ser Ile Ile Arg Ser His Arg Thr Gln Glu Asp Thr		
165	170	175
Val Val Ala Leu Ser Val Thr Gly Ile Leu Lys Val Trp Ile Val Thr		
180	185	190
Ser Glu Ile Ser Asp Met Gln Asp Thr Glu Pro Ile Phe Glu Glu Glu		
195	200	205
Ser Lys Pro Ile Tyr Cys Gln Asn Cys Gln Ser Ile Ser Phe Cys Ala		
210	215	220
Phe Thr Gln Arg Ser Leu Leu Val Val Cys Ser Lys Tyr Trp Arg Val		
225	230	235
Phe Asp Ala Gly Asp Tyr Ser Leu Leu Cys Ser Gly Pro Ser Glu Asn		
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Gly Gln Thr Trp Thr Gly Gly Asp Phe Val Ser Ser Asp Lys Val Ile		
260	265	270
Ile Trp Thr Glu Asn Gly Gln Ser Tyr Ile Tyr Lys Leu Pro Ala Ser		
275	280	285
Cys Leu Pro Ala Ser Asp Ser Phe Arg Ser Asp Val Gly Lys Ala Val		
290	295	300
Glu Asn Leu Ile Pro Pro Val Gln His Ile Leu Leu Asp Arg Lys Asp		
305	310	315
Lys Glu Leu Leu Ile Cys Pro Pro Val Thr Arg Phe Phe Tyr Gly Cys		
325	330	335
Arg Glu Tyr Phe His Lys Leu Leu Ile Gln Gly Asp Ser Ser Gly Arg		
340	345	350
Leu Asn Ile Trp Asn Ile Ser Asp Thr Ala Asp Lys Gln Gly Ser Glu		
355	360	365
Glu Gly Leu Ala Met Thr Thr Ser Ile Ser Leu Gln Glu Ala Phe Asp		
370	375	380
Lys Leu Asn Pro Cys Pro Ala Gly Ile Ile Asp Gln Leu Ser Val Ile		
385	390	395
Pro Asn Ser Asn Glu Pro Leu Lys Val Thr Ala Ser Val Tyr Ile Pro		
405	410	415
Ala His Gly Arg Leu Val Cys Gly Arg Glu Asp Gly Ser Ile Val Ile		
420	425	430

Val Pro Ala Thr Gln Thr Ala Ile Val Gln Leu Leu Gln Gly Glu His
 435 440 445
 Met Leu Arg Arg Gly Trp Pro Pro His Arg Thr Leu Arg Gly His Arg
 450 455 460
 Asn Lys Val Thr Cys Leu Leu Tyr Pro His Gln Val Ser Ala Arg Tyr
 465 470 475 480
 Asp Gln Arg Tyr Leu Ile Ser Gly Gly Val Asp Phe Ser Val Ile Ile
 485 490 495
 Trp Asp Ile Phe Ser Gly Glu Met Lys His Ile Phe Cys Val His Gly
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 Gly Glu Ile Thr Gln Leu Leu Val Pro Pro Glu Asn Cys Ser Ala Arg
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 Phe Pro Ile Gln Val Ile Lys Trp Arg Pro Ser Asp Asp Tyr Leu Val
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 595 600 605
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 610 615 620
 Ala Val Asn Leu Lys Gln Ala Met Thr Arg Arg Ser Leu Ala Ala Leu
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 Lys Asn Met Ala His His Lys Leu Gln Thr Leu Ala Thr Asn Leu Leu
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 Ala Ser Glu Ala Ser Asp Lys Gly Asn Leu Pro Lys Tyr Ser His Asn
 660 665 670
 Ser Leu Met Val Gln Ala Ile Lys Thr Asn Leu Thr Asp Pro Asp Ile
 675 680 685
 His Val Leu Phe Phe Asp Val Glu Ala Leu Ile Ile Gln Leu Leu Thr
 690 695 700
 Glu Glu Ala Ser Arg Pro Asn Thr Ala Leu Ile Ser Pro Glu Asn Leu
 705 710 715 720
 Gln Lys Ala Ser Gly Ser Ser Asp Lys Gly Gly Ser Phe Leu Thr Gly
 725 730 735
 Lys Arg Ala Ala Val Leu Phe Gln Gln Val Lys Glu Thr Ile Lys Glu
 740 745 750
 Asn Ile Lys Glu His Leu Leu Asp Asp Glu Glu Glu Asp Glu Glu Ile
 755 760 765
 Met Arg Gln Arg Arg Glu Glu Ser Asp Pro Glu Tyr Arg Ser Ser Lys
 770 775 780
 Ser Lys Pro Leu Thr Leu Leu Glu Tyr Asn Leu Thr Met Asp Thr Ala
 785 790 795 800
 Lys Leu Phe Met Ser Cys Leu His Ala Trp Gly Leu Asn Glu Val Leu

805	810	815
Asp Glu Val Cys Leu Asp Arg Leu Gly Met Leu Lys Pro His Cys Thr		
820	825	830
Val Ser Phe Gly Leu Leu Ser Arg Gly Gly His Met Ser Leu Met Leu		
835	840	845
Pro Gly Tyr Asn Gln Pro Ala Cys Lys Leu Ser His Gly Lys Thr Glu		
850	855	860
Val Gly Arg Lys Leu Pro Ala Ser Glu Gly Val Gly Lys Gly Thr Tyr		
865	870	875
Gly Val Ser Arg Ala Val Thr Thr Gln His Leu Leu Ser Ile Ile Ser		
885	890	895
Leu Ala Asn Thr Leu Met Ser Met Thr Asn Ala Thr Phe Ile Gly Asp		
900	905	910
His Met Lys Lys Gly Pro Thr Arg Pro Pro Arg Pro Ser Thr Pro Asp		
915	920	925
Leu Ser Lys Ala Arg Gly Ser Pro Pro Thr Ser Ser Asn Ile Val Gln		
930	935	940
Gly Gln Ile Lys Gln Val Ala Ala Pro Val Val Ser Ala Arg Ser Asp		
945	950	955
Ala Asp His Ser Gly Ser Asp Pro Pro Ser Ala Pro Ala Leu His Thr		
965	970	975
Cys Phe Leu Val Asn Glu Gly Trp Ser Gln Leu Ala Ala Met His Cys		
980	985	990
Val Met Leu Pro Asp Leu Leu Gly Leu Asp Lys Phe Arg Pro Pro Leu		
995	1000	1005
Leu Glu Met Leu Ala Arg Arg Trp Gln Asp Arg Cys Leu Glu Val Arg		
1010	1015	1020
Glu Ala Ala Gln Ala Leu Leu Leu Ala Glu Leu Arg Arg Ile Glu Gln		
1025	1030	1035
Ala Gly Arg Lys Glu Ala Ile Asp Ala Trp Ala Pro Tyr Leu Pro Gln		
1045	1050	1055
Tyr Ile Asp His Val Ile Ser Pro Gly Val Thr Ser Glu Ala Ala Gln		
1060	1065	1070
Thr Ile Thr Thr Ala Pro Asp Ala Ser Gly Pro Glu Ala Lys Val Gln		
1075	1080	1085
Glu Glu Glu His Asp Leu Val Asp Asp Asp Ile Thr Thr Gly Cys Leu		
1090	1095	1100
Ser Ser Val Pro Gln Met Lys Lys Ile Ser Thr Ser Tyr Glu Glu Arg		
1105	1110	1115
Arg Lys Gln Ala Thr Ala Ile Val Leu Leu Gly Val Ile Gly Ala Glu		
1125	1130	1135
Phe Gly Ala Glu Ile Glu Pro Pro Lys Leu Leu Thr Arg Pro Arg Ser		
1140	1145	1150
Ser Ser Gln Ile Pro Glu Gly Phe Gly Leu Thr Ser Gly Gly Ser Asn		
1155	1160	1165
Tyr Ser Leu Ala Arg His Thr Cys Lys Ala Leu Thr Phe Leu Leu Leu		
1170	1175	1180

Gln Pro Pro Ser Pro Lys Leu Pro Pro His Ser Thr Ile Arg Arg Thr
 1185 1190 1195 1200
 Ala Ile Asp Leu Ile Gly Arg Gly Phe Thr Val Trp Glu Pro Tyr Met
 1205 1210 1215
 Asp Val Ser Ala Val Leu Met Gly Leu Leu Glu Leu Cys Ala Asp Ala
 1220 1225 1230
 Glu Lys Gln Leu Ala Asn Ile Thr Met Gly Leu Pro Leu Ser Pro Ala
 1235 1240 1245
 Ala Asp Ser Ala Arg Ser Ala Arg His Ala Leu Ser Leu Ile Ala Thr
 1250 1255 1260
 Ala Arg Pro Pro Ala Phe Ile Thr Thr Ile Ala Lys Glu Val His Arg
 1265 1270 1275 1280
 His Thr Ala Leu Ala Ala Asn Thr Gln Ser Gln Gln Asn Met His Thr
 1285 1290 1295
 Thr Thr Leu Ala Arg Ala Lys Gly Glu Ile Leu Arg Val Ile Glu Ile
 1300 1305 1310
 Leu Ile Glu Lys Met Pro Thr Asp Val Val Asp Leu Leu Val Glu Val
 1315 1320 1325
 Met Asp Ile Ile Met Tyr Cys Leu Glu Gly Ser Leu Val Lys Lys Lys
 1330 1335 1340
 Gly Leu Gln Glu Cys Phe Pro Ala Ile Cys Arg Phe Tyr Met Val Ser
 1345 1350 1355 1360
 Tyr Tyr Glu Arg Asn His Arg Ile Ala Val Gly Ala Arg His Gly Ser
 1365 1370 1375
 Val Ala Leu Tyr Asp Ile Arg Thr Gly Lys Cys Gln Thr Ile His Gly
 1380 1385 1390
 His Lys Gly Pro Ile Thr Ala Val Ala Phe Ala Pro Asp Gly Arg Tyr
 1395 1400 1405
 Leu Ala Thr Tyr Ser Asn Thr Asp Ser His Ile Ser Phe Trp Gln Met
 1410 1415 1420
 Asn Thr Ser Leu Leu Gly Ser Ile Gly Met Leu Asn Ser Ala Pro Gln
 1425 1430 1435 1440
 Leu Arg Cys Ile Lys Thr Tyr Gln Val Pro Pro Val Gln Pro Ala Ser
 1445 1450 1455
 Pro Gly Ser His Asn Ala Leu Lys Leu Ala Arg Leu Ile Trp Thr Ser
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 Met Val
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30